ARTICLE XVII.

OBSERVATIONS WITH A VIEW TO DETERMINING THE INFLUENCE OF JABORANDI ON THE ELIMINATION OF UREA BY THE KIDNEYS.

By JAMES TYSON, M.D., Professor of General Pathology and Morbid Anatomy in the University of Pennsylvania, one of the Physicians to the Philadelphia Hospital, etc., and ED. T. BRUEN, M.D., one of the Physicians to the Philadelphia Hospital.

THE writers were induced to make these observations in consequence of the very satisfactory results (see *Phila. Med. Times*, April 14, 1877) which followed the use of jaborandi in cases of Bright's disease of the kidney attended by dropsy, and whether acute or chronic; in the former the drug often hastening a tardy convalescence, and in the latter greatly ameliorating the symptoms. Our plan of administration at the Philadelphia Hospital is as follows: A drachm of the powdered leaves is infused in about eight fluidounces of hot water, and when sufficiently cool it is stirred up, and one-half the quantity is drunk; half an hour later the remainder is taken. No attempt is made to strain away the powdered leaves, as it is believed that these contribute to the desired result. Within an hour, profuse sweating almost invariably results. Ptyalism is less constant in its occurrence. Should one drachm of the powdered leaves fail to produce sweating, two drachms are used in the same manner, but this is almost never necessary.

Our method was 1st to determine the 24 hours urea in the urine of persons in apparent health, before and immediately succeeding the jaborandi sweat; 2d, to repeat the same process in cases of Bright's disease.

Thus A. C., a healthy man, passed 960 cubic centimetres of urine in the 24 hours, containing 19 grammes of urea. In the 24 hours, beginning with the jaborandi sweat, the same man passed 1026 c. c. urine, containing 20.7 grammes urea.

L. D., a healthy woman, passed 1000 cub. cent. urine, sp. gr. 1018, in 24 hours, containing 19 grammes urea; the same woman in 24 hours immediately succeeding jaborandi, passed 900 cub. cent. of urine, sp. gr. 1022, containing 27 grammes urea.

Charles M., in health, passed in 24 hours 1620 c. c., sp. gr. 1019, and containing 24.3 grammes urea. In 24 hours succeeding jaborandi the same man passed 1800 c. c., sp. gr. 1012, containing 27 grammes urea.

Cases of Chronic Bright's Disease.

D. B., with chronic catarrhal nephritis, passed 1250 c. c. urine in 24 hours, containing 5 grammes of urea. The same man in 24 hours immediately succeeding a jaborandi sweat passed 1650 c. c., containing 6.5 grms. urea,

Mary J. is a case of Bright's disease which has been nearly five years under observation. She more than once has had acute exacerbations with enormous œdema and other complications, from which she was not expected to recover, but now, although still having albuminuria with tube casts, and retinal apoplexy, describes herself as perfectly well, and is doing the hard work of a nurse in the women's medical ward. She apparently eliminates a large amount of urea, passing in 24 hours 1500 c. c. of urine, containing 42 grms. of urea. In 24 hours succeeding a sweat she passed 1400 c. c. containing 56 grammes of urea. It is highly probable that this constant large elimination of urea is the cause of her apparently excellent health.

M. J., No. 2, a woman with chronic catarrhal nephritis, passed 800 c. c. urine in 24 hours, containing only 3.2 grms. urea; in 24 hours succeeding a jaborandi sweat she passed 600 c. c. containing but 3 grms. urea.

J. R., with chronic Bright's disease, passed 2100 c. c. urine in 24 hours, containing 27.3 grms. urea; in the 24 hours immediately succeeding a jaborandi sweat he passed 2700 c. c. urine containing 29.7 grms. urea.

It will be seen from a comparison of the above results, which can be readily done in the following arrangement:—

	In health, before Jaborandi.		*After Jaborandi.*	
A. C., male,	960 c.c. urine,	19 gms. urea.	1026 c.c. urine,	20.7 gms. urea.
L. D., female,	1000 " "	19 " "	900 " "	27.0 " "
C. M., male,	1620 " "	24.3 " "	1800 " "	27.0 " "

	In Bright's Disease, before Jaborandi.		*After Jaborandi.*	
D. B., male,	1250 c.c. urine,	5 gms. urea.	1650 c.c. urine,	6.5 gms. urea.
M. J., female,	1500 " "	42 " "	1400 " "	56.0 " "
M. J.^{2d}, female,	800 " "	3.2 " "	600 " "	3.0 " "

That in health the quantity of urine is slightly increased in the 24 hours in one case, and somewhat diminished in two, while the urea itself is increased decidedly in each instance. In Bright's disease the urine is increased in one case and diminished in two, while the urea is increased in two instances and very slightly diminished in one.

From these facts we must at least conclude that the tendency of jaborandi in health and disease is to increase the elimination of urea. This would rationally be expected from the increased freedom of movement of the blood through the entire circulation, and especially through the kidneys, which must follow profuse sweating from any cause. But this increase is scarcely sufficient to justify us in attributing the entire benefit which follows jaborandi sweats in Bright's disease. Such advantage is, doubtless, also largely due to the removal of fluid and elimination of urea by the skin.

PATHOLOGICAL LABORATORY OF THE UNIVERSITY OF PENNA., June 1st, 1877.

ARTICLE XVIII.

THE HÆMARUMASCOPE. By OCTAVIUS A. WHITE, M.D., of New York.

A SERIES of experiments, recently undertaken by me with the ordinary modern appliances, in order to determine, if possible, certain physiological points appertaining to the circulation of the blood, could not fail to impress